

Name: Rick Steffe

Element Yearbook: Biographical Worksheet

Element Name: Francium Element Symbol: Fr

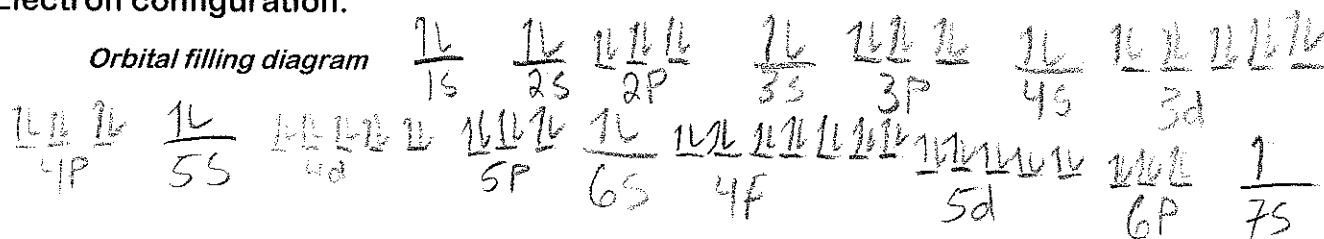
Atomic Number: 87 Group name/ number: Alkali Metal 1

Atomic Mass (to nearest thousandth): 223.000 amu

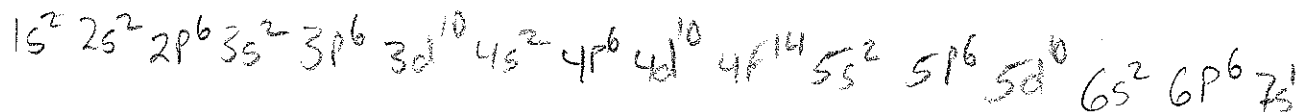
Number of protons: 87 Number of neutrons: 136

Number of electrons: 87 Number of valence electrons: 1

Electron configuration:



Final electron configuration:



HISTORY

Discovered by: Mlle Marquerite Perey of the curie institute in Paris.

Year discovered: 1939 Where discovered: France

Derivation of name/symbol: Received name for being discovered in France.

PHYSICAL AND CHEMICAL CHARACTERISTICS

Phase at room temperature: Solid

Density at room temperature (g/cm³): 1.87 g/cm³

Melting Point (K, °C, °F): 300K, 27°C, 80°F Boiling Point (K, °C, °F): 950K, 677°C, 1250°F

Color: metallic Odor: Not known Oxidation states: 1 (Strongly Basic)

Ionic or covalent bonding: Bonds with halogens and hydroxide ions

Ionization Energy (first) (kJ/mol): 380 kJ/mol

Electronegativity (Pauling): 0.7

Reactivity with oxygen, water, acids or bases:

Highly radioactive Half life of 22 minutes, which results in no experiments being performed.

Name: _____

CURRENT INFORMATION

Where found (specific minerals or sources/specific countries):

Francium is a result of disintegration of actinium.
Francium is found in uranium ores and can be made artificially by bombarding thorium with protons.

Uses:

Basic scientific research, with so very little amount of it and a half life of 22 minutes. Also this being highly radioactive does not help

Toxicity/hazards:

Highly radioactive.

Abundance:

30 grams or 1 ounce is in the earth's crust total at any given time. Last natural element found on earth.

Sources used to gather this information:

- 1) Wikipedia.com
- 2) chemical.com
- 3) webelements.com